

Remarks

Reconsideration of this Patent Application is respectfully requested, particularly as herein amended.

Following a summary of the status of this Patent Application, the Office Action of March 30, 2010, provides a "Response to Arguments" which summarizes specific arguments directed to the amended claims presented in the Reply filed on January 7, 2010. The undersigned thanks the Examiner for this helpful summary and, in an effort to advance prosecution, the Remarks which follow will primarily be directed to the position stated in this summary, with the understanding that the Remarks presented in earlier papers filed in connection with this Patent Application are incorporated by reference as if fully stated herein.

The Office Action of March 30, 2010, rejects claims 13, 15 to 19, 21 to 24 and 26 to 37 under 35 U.S.C. §103(a) as being unpatentable over the previously cited article authored by Choi et al. in proposed combination with U.S. Patent No. 5,847,958 (Shaikh et al.) and U.S. Patent No. 5,775,402 (Sachs et al.).

Claim 13 has been amended to incorporate the subject matter of former claims 36 and 37, which have been canceled, claim 15 has been amended to further clarify the structures of the recited "isolating circuit" and claims 38 to 42 have been newly presented. It is respectfully submitted that for reasons

which follow, and for reasons previously discussed, the rejection of claims under 35 U.S.C. §103(a) based on a proposed combination of Choi et al., Shaikh et al. and Sachs et al. is left moot and a reconsideration of all pending claims is respectfully requested.

As noted previously, applicants' claims 13 and 15 are generally directed to a mold produced by computer-aided design which breaks down the body of the mold into elementary strata, followed by manufacture of the elementary strata and assembly of the manufactured strata to reconstruct the mold. As part of this, both a fluid transport circuit and an isolating circuit are developed within the mold.

To this end, both the fluid transport circuit and the isolating circuit are broken down into a plurality of elementary chambers, which are simultaneously produced in the manufactured strata during their manufacture, followed by reconstruction of both the fluid transport circuit and the isolating circuit upon assembly of the manufactured strata. It is respectfully submitted that neither a method nor a mold incorporating such improvements is fairly disclosed by Choi et al., Shaikh et al. and Sachs et al.

Choi et al. disclose various methods for performing a computer-aided manufacture of structures from laminated sheets, including the method of "Stratoconception" that was identified in the specification for this Patent Application (e.g., at line 10 of page 4 of the original specification), and the disclosed

methods have certain features in common with elements recited in applicants' claims. However, among other distinctions, there is no disclosure in Choi et al. of a fluid transport circuit or an isolating circuit and, as a consequence, Choi et al. fail to disclose either the simultaneous production of the elementary chambers of a fluid transport circuit and an isolating circuit in the manufactured strata during their manufacture, or the reconstruction of both a fluid transport circuit and an isolating circuit upon assembly of the manufactured strata, in accordance with applicants' claims.

Shaikh et al. has been cited as a disclosure of the fluid transport circuit which is absent from the disclosure of Choi et al. However, Shaikh et al. fail to disclose an isolating circuit and, as a consequence, fail to disclose an isolating circuit coupled with a fluid transport circuit, simultaneous production of the elementary chambers of a fluid transport circuit and an isolating circuit in the manufactured strata during their manufacture, or the reconstruction of both a fluid transport circuit and an isolating circuit upon assembly of the manufactured strata, in accordance with applicants' claims.

Sachs et al. is currently cited as a disclosure of the combination of a fluid transport circuit and an isolating circuit which is absent from Choi et al. and Shaikh et al. However, Sachs et al. relates to a process involving sintering layers of powder in a binder, and not an assembly of manufactured plates. As a

consequence, it is respectfully submitted that the disclosure of Sachs et al. is not properly combined with the disclosures of Choi et al. and Shaikh et al. for the rejection of applicants' claims under 35 U.S.C. §103(a) because of the fundamental and significant differences in the processes used to form sintered layers and the processes used to form manufactured plates. It is, therefore, respectfully submitted that applicants' claims are not properly subject to rejection under 35 U.S.C. §103(a) based on the combination of Choi et al., Shaikh et al. and Sachs et al. which is proposed in the Office Action of March 30, 2010.

It is further noted that the Examiner questions the statement made in the Reply of January 7, 2010, at lines 17 to 25 of page 16, regarding the subject matter of dependent claim 19, taking the position that "Sachs teaches fins for mechanically reinforcing the fluid transport circuit...." This position is respectfully traversed because the fins 11, mounds 12, 14 and stubs 13 disclosed by Sachs et al. do not extend across the channels which incorporate them, and as a consequence, cannot provide mechanical reinforcement for these channels. This distinction is further defined in a newly presented dependent claim 42, which finds support at lines 21 to 24 of page 12 of the English translation of the original French-text specification for this Patent Application.

The Examiner also questions the statement made in the Reply of January 7, 2010, at lines 6 to 19 of page 17, taking the

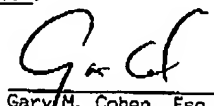
position that Sachs et al. teach the features mentioned. It is to be noted that the statement referred to by the Examiner was made with reference to the rejection of claims 21, 22 and 32 to 35, and which are specifically directed to the isolating circuit coupled with the fluid transport circuit. Such structures are in no way disclosed by Choi et al. or Shaikh et al., and it is once again submitted that the disclosure of Sachs et al. is not appropriately cited for purposes of rejecting applicants' claims for reasons previously stated.

As a final matter, claims 38 to 41 have been presented to recite structural relationships which are best shown with reference to Figs. 11 to 13 of the drawings for this Patent Application, and to present additional distinctions between applicants' improvements and the disclosures of Choi et al., Shaikh et al. and Sachs et al.

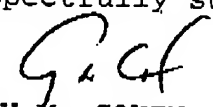
It is, therefore, respectfully submitted that applicants' claims are not subject to rejection under 35 U.S.C. §103(a) based on the disclosures of Choi et al., Shaikh et al. and Sachs et al., and that applicants' claims are in condition for allowance. Corresponding action is earnestly solicited.

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office (Fax No. 571-273-8300) on: September 28, 2010.

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Respectfully submitted,

  
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